

continually flying and hunting for the small minnows that are to be found there in the spring. As darkness approached, the big flock on the shore apparently increased and the smaller flock on the coal docks decreased to about a dozen. The flocks resting on the ice to the north seemed to stay about the normal size, but the flocks on the outer shore seemed to be gradually increasing all the time until there were at least eight hundred birds; apparently that was the spot where they would sleep that night. We were fully satisfied of the fact and were planning how we could best approach the flock to catch them. We had a number of nets put together on poles in different manners, so that they could be handled by either one or two persons, and we speculated on how big a catch we would be able to make; but just at the very last glimpse of daylight, apparently, every bird in the vicinity quietly rose up in the air. We left our car and blankets and started off to find what direction they would take, but they seemed to simply evaporate from our view. Gradually the entire flock disappeared in the darkness without taking any certain direction. We stayed about the harbor for over an hour and searched all the slips and breakwaters with the searchlights, but not a single bird could we find. We are still wondering, "Where do the Gulls sleep at night?"

A HAUNT OF THE GREAT HORNED OWL

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The Great Horned Owl is not a very common species in Northern Ohio, nor is it considered a very desirable neighbor. For many years a pair of these birds has lived in the woods just south of Willoughby, but not until six years ago was I able to discover a nest. Since then there have been exceptionally good opportunities for studying their nests, habits, and other life characteristics.

On the morning of April 27th, 1919, two local ornithologists, C. M. Shipman and R. W. Hill, accompanied me to the woods near south Willoughby. We had been informed that there was an owl's nest in this woods and after considerable search we finally located it in a tall beech tree growing at the foot of a steep hillside. The nest was one that had been built many years before by a pair of Red-tailed Hawks. It had been occupied later by Red-shouldered Hawks and Barred Owls so that evi-

dently the nesting place was a quite popular one. From the brow of the hill we could plainly see the old owl and three little owls. All four of them were facing us, and had evidently heard us as we approached, for the ears of these birds are very sensitive.

With our field glasses we could make out every move they made, and although we were as quiet as possible, every little noise that we made was evidently heard by these birds. The old owl stood straight up with ears erect and eyes wide open watching us from behind the three little owls.

There were four or five Red-shouldered Hawks and about twenty crows flying about overhead and scolding at each other as is their custom at such times. The noise made by these birds evidently disturbed the owl more than our presence, for it kept turning its head from side to side in a nervous manner, as if watching the other birds.

Just as we had set our camera to take a picture of the nest, the owl became alarmed and flew away through the hemlock trees, closely followed by the crows amid a tremendous din of calling and screaming. We went away for half an hour, and upon returning found the owl on the nest again.

Two weeks later some local hunters raided the nest, killed one of the old owls and captured all three of the young ones. We regretted this incident very much as we feared we would not get another good opportunity for studying them.

During the next three weeks we had a splendid opportunity for studying the three young owls, which were kept in a cage. They ate raw meat greedily and in large quantities. One evening a boy brought in some Screech Owls and put them in the same cage. In the morning they had all disappeared and it was quite evident that they had been eaten by the young Horned Owls.

The next spring we did not find the owl's nest, but in the spring of 1921 while walking through the same woods, we heard the familiar sound of crows calling excitedly about something. On approaching we discovered that the crows had located another Horned Owl's nest, this time in a hollow limb near the top of a huge Slippery Elm tree that already showed much decay. This nest is shown in the accompanying cut.

It contained two young owls. One of the parent owls frequently was found sitting side by side with the young ones in the opening. When we visited the place on April 30th, the

young owls had left the nest and were roosting in the dead limbs of the same tree.

THE 1924 NEST

During the seasons of 1921, 1922, 1923, and 1924, the owls returned to the same hollow tree and each year succeeded in raising their broods. During the winter of 1924, H. S. Bell of the Cleveland Museum of Natural History, and C. M. Shipman, president of the Burroughs Nature Club of Willoughby, determined to make an intensive study of the nest from the time of mating until the young owls should leave the nesting tree. Accordingly they put spikes into the tree so as to enable one to climb up readily in all kinds of weather. Without going into too much detail, their attempts were very successful and the information obtained was the most complete ever recorded about the Great Horned Owl.

In just one point was the record defective. The eggs were laid earlier than expected and consequently the exact date was not obtained, but based on the date of hatching and the usual period of incubation, they must have been laid on February ninth or tenth. The temperature was hovering near zero at that time and the owls must have had a very wintry experience brooding on the eggs while the February and March blizzards were whistling around the nesting tree. The brooding bird did not sit as closely as one would expect, and one cold morning she was absent from the nest for more than thirty-five minutes at one time.

The nesting cavity was fifty-six feet four inches above the ground and was a large irregular cavity in the dead trunk of the tree. On the inside it was nearly as large as a bushel basket and the eggs were laid in a depression in one corner. There were two eggs and in shape they were more round than oval. The young owls hatched on March 8, and March 9, respectively. After that the nest was visited three or four times a week in order to observe what food was provided for the young and how fast they grew.

The food supply was most interesting. For example: On March 22, there were two rabbits and four rats in the nest. On March 31, we found the greatest variety. There were parts of two rabbits, one entire weasel, one field mouse and two rats, besides the remains of a pigeon. The complete record of food

that we found in the nest for the season was as follows: three mice, ten rats, nine rabbits, one weasel, two pigeons, one Robin, one Flicker, and one Sapsucker.

The untimely end of the Sapsucker is easily explained. We saw him drilling holes in a tree only a few feet away from the nesting tree and no doubt he roosted in that vicinity where one of the owls noticed him when starting on its nocturnal hunt.

Early in the season the parent owls showed no disposition to fight, but along toward the last when the young owls were taken from the nest to be photographed and weighed they showed increasing hostility and hooted threateningly from neighboring trees. They never actually attacked any of our party.

During the last few days that the young owls were in the nest their food supply was cut down to such an extent that we inferred that the owls were trying to starve them into leaving the nest. One day there was no food at all in the nest. On April 23 the young owls left the home nest and took up their abode in surrounding trees.

These owls have been condemned so bitterly by the various writers on ornithology, as well as by the State and Government authorities, that this study seems to put them in a better light. Surely the Horned Owl should not be condemned if their depredations are confined to rabbits, rats, and similar vermin. Furthermore from the naturalist's point of view, it seems a pity to destroy what few rare birds of prey are left in the settled districts of Northern Ohio.

Willoughby, Ohio.